## KBP CONSULTING, INC.

July 10, 2021

Mr. Nizar Alawamleh Project Manager Location Ventures 299 Alhambra Circle, Suite 510 Coral Gables, Florida 33134

Re: Olakino House – Fort Lauderdale, Florida Traffic Statement

Dear Nizar:

As requested, KBP Consulting, Inc. has prepared a traffic statement associated with the proposed development of four (4) vacant parcels of land located on the west side of Bayshore Drive between Riomar Street and Terramar Street in the City of Fort Lauderdale, Broward County, Florida. More specifically the site is located at 529 – 553 Bayshore Drive and the Broward County Folio Numbers are as follows:

- 5042 01 04 0600
- 5042 01 04 0610
- 5042 01 04 0620
- 5042 01 04 0630

This traffic statement addresses the trip generation characteristics associated with the proposed development (known as "Olakino House") on the site and documents if the estimated number of net new project trips exceeds the minimum trip thresholds established by the City of Fort Lauderdale that would require a comprehensive traffic impact study.

#### TRAFFIC IMPACT ANALYSIS

#### **Proposed Development**

The total land area of the subject site is approximately 1.5384 acres (67,011 square feet). The site is proposed to be developed with two (2) multi-story residential buildings. Both buildings will have eleven (11) floors and the total number of dwelling units for the Olakino House development will be 65. The site will offer several amenities for their residents including a spa / fitness area, a dining area, a conference room, a golf simulator, a pool, and a rooftop terrace area.

Vehicular access to the site will be provided by one (1) full access driveway on Bayshore Drive that will provide access to the parking garage. A second driveway will be provided on Bayshore Drive that will provide access to the service / loading area. A project location map is presented in Attachment A to this memorandum and the site plan is presented in Attachment B.

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#### **Trip Generation Analysis**

A trip generation analysis has been conducted for the proposed development at the subject site. The analysis was performed using the trip generation rates and equations published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual (10<sup>th</sup> Edition)*. The trip generation analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. According to the referenced ITE manual, the most appropriate land use category and corresponding rates / equations for the proposed development are as follows:

#### Multi-Family Housing (High-Rise) – ITE Land Use #222

 $\Box$  Weekday: T = 3.94 (X) + 211.81

where T = number of trips and X = number of dwelling units

 $\Box$  AM Peak Hour: T = 0.28 (X) + 12.86 (24% in / 76% out)

 $\Box$  PM Peak Hour: T = 0.34 (X) + 8.56 (61% in / 39% out)

Relevant excerpts from the referenced ITE manual are presented in Attachment C to this memorandum. Utilizing the above-listed trip generation equations from the referenced ITE document, a trip generation analysis was undertaken for the proposed development. The results of this effort are documented in Table 1 below.

		Table 1	1					
		Olakino H	ouse					
Trip Generation Analysis								
5	29 - 553 Bayshore	Drive - Fo	rt Lauder	dale, Flori	da			
		Daily	AM Peak Hour Trips PM Peak Hour Tri		Trips			
Land Use	Size	Trips	In	Out	Total	In	Out	Total
<b>Proposed</b> Multi-Family Housing (High-Rise)	65 DU	468	7	24	31	19	12	31

Compiled by: KBP Consulting, Inc. (July 2021).
Source: ITE Trip Generation Manual (10th Edition).

As indicated in Table 1 on the previous page, the proposed Olakino House residential development is anticipated to generate 468 daily vehicle trips, 31 AM peak hour vehicle trips (7 inbound and 24 outbound) and 31 vehicle trips (19 inbound and 12 outbound) during the typical afternoon peak hour.

#### **Conclusions**

Based upon the foregoing analysis, the proposed project is not required to prepare a comprehensive traffic impact study for the following reasons:

According to the City of Fort Lauderdale's ULDR Section 47-25.2.M.4, when the
proposed development generates more than 1,000 net new daily trips, a traffic impact
study is required. The subject project is projected to generate 468 net new daily vehicle
trips.

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o And, if the daily trips are less than 1,000 and more than 20% of the daily trips are anticipated to arrive or depart, or both, within one-half hour, a traffic impact study is required. As presented in Table 1, the proposed development will result in 31 additional vehicle trips during the AM and PM peak hours. The maximum number of trips anticipated within one-half hour is approximately 3.42% of the daily vehicle trips, which is significantly less than the 20% threshold. (Thirty-one additional peak hour vehicle trips occurring in one (1) hour represents, on average, 16 vehicle trips in one-half hour. Sixteen (16) vehicle trips equate to approximately 3.42% of the 468 net new daily vehicle trips.)

Based upon the foregoing analyses, the trip generation characteristics of the Olakino House residential development do not warrant further detailed traffic analyses. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

KBP CONSULTING, INC.

Karl B. Peterson, P.E.

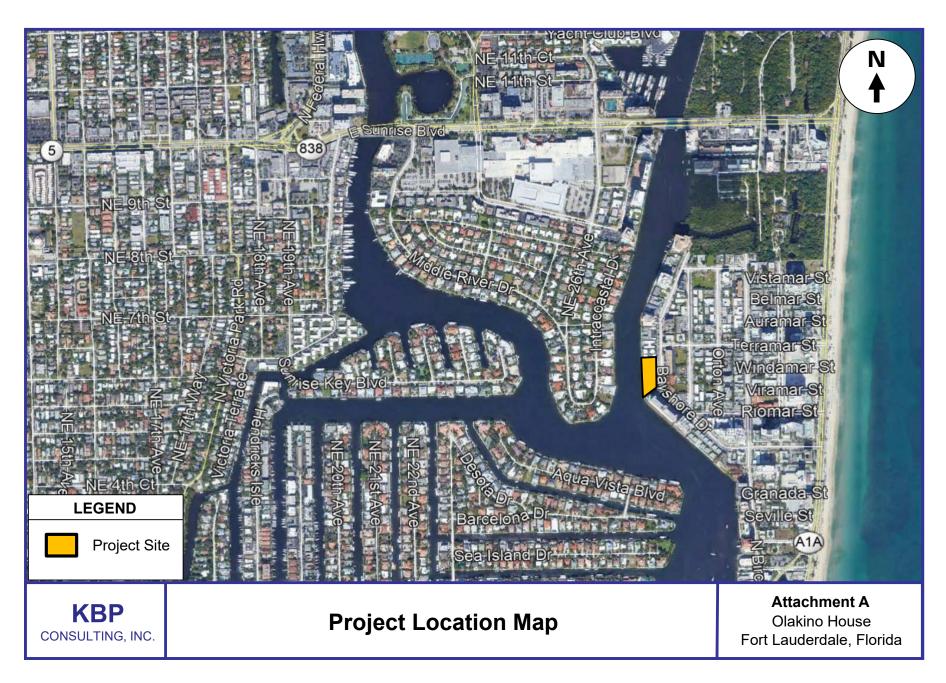
Florida Registration Number 49897 Engineering Business Number 29939

## **Attachment A**

**Olakino House** 

**Project Location Map** 

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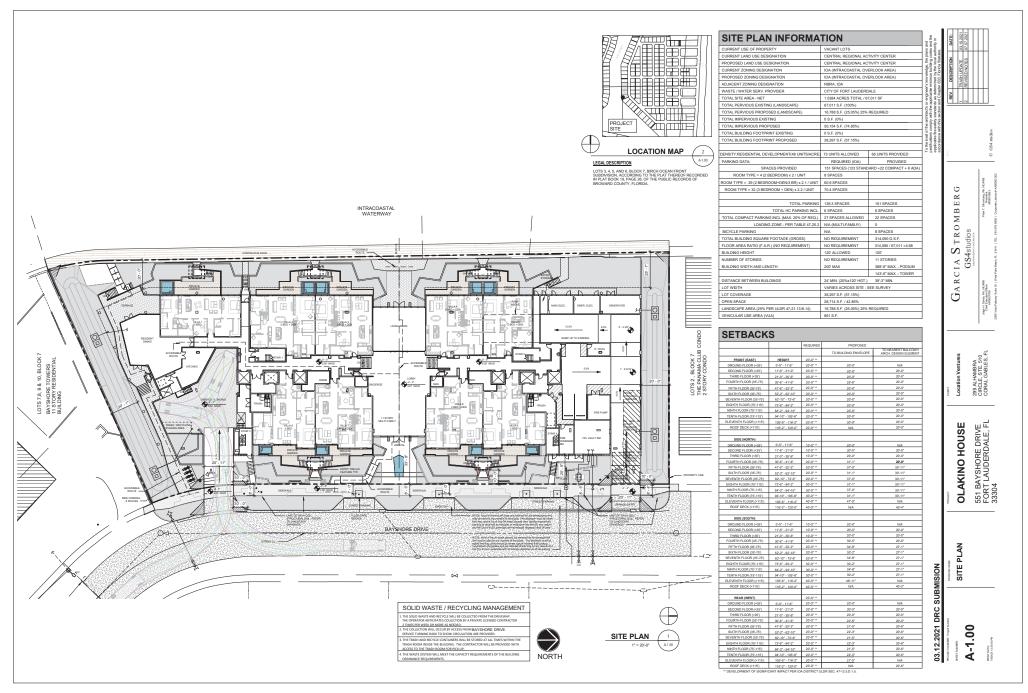
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## **Attachment B**

**Olakino House** 

Site Plan

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## **Attachment C**

**Olakino House** 

Relevant Excerpts from the ITE *Trip Generation Manual (10<sup>th</sup> Edition)* 

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### Land Use: 222 Multifamily Housing (High-Rise)

#### Description

High-rise multifamily housing includes apartments, townhouses, and condominiums that have more than 10 levels (floors). They are likely to have one or more elevators. Multifamily housing (low-rise) (Land Use 220), multifamily housing (mid-rise) (Land Use 221), off-campus student apartment (Land Use 225), and high-rise residential with 1st-floor commercial (Land Use 232) are related land uses.

#### **Additional Data**

In prior editions of *Trip Generation Manual*, the high-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the 12 sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 1.57 residents per occupied dwelling unit.

For the 26 sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 98.4 percent of the total dwelling units were occupied.

Time-of-day distribution data for this land use are presented in Appendix A. For the eight dense multiuse sites for which 24-hour time-of-day person trip data were collected, the overall highest vehicle volumes during the AM and PM on a weekday were between 7:30 and 8:30 a.m. and 5:30 and 6:30 p.m., respectively. The Saturday and Sunday peak hours for person trips were between 5:00 and 6:00 p.m. and 4:45 and 5:45 p.m., respectively.

For the six center city core sites for which 24-hour time-of-day person trip data were collected, the overall highest vehicle volumes during the AM and PM on a weekday were between 8:00 and 9:00 a.m. and 6:00 and 7:00 p.m., respectively. The Saturday and Sunday peak hours for person trips were between 11:30 a.m. and 12:30 p.m. and 11:00 a.m. and 12:00 p.m., respectively.

For the 12 sites for which data were provided for both occupied dwelling units and residents, there was an average of 1.57 residents per occupied dwelling unit.

For the 26 sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 98.4 percent of the units were occupied.

The average numbers of person trips per vehicle trip at the three center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 2.52 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- · 2.70 during Weekday, AM Peak Hour of Generator
- 1.88 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.22 during Weekday, PM Peak Hour of Generator



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The average numbers of person trips per vehicle trip at the six dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 2.81 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- · 2.49 during Weekday, AM Peak Hour of Generator
- 2.17 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- · 2.85 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 2000s, and the 2010s in California, District of Columbia, Maryland, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, Virginia, and Washington.

#### **Source Numbers**

105, 168, 169, 187, 305, 321, 356, 818, 862, 901, 910, 949, 963, 964, 966, 967



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# Multifamily Housing (High-Rise) (222)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday

Setting/Location: General Urban/Suburban

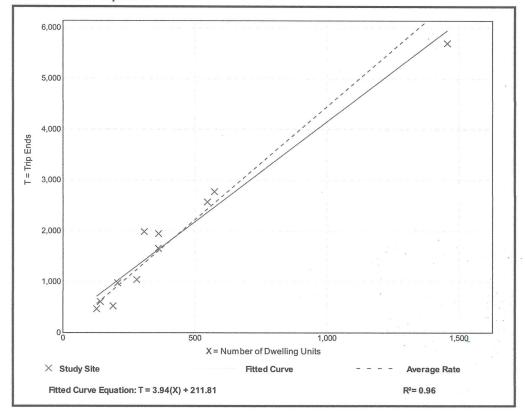
Number of Studies: 11 Avg. Num. of Dwelling Units: 414

Directional Distribution: 50% entering, 50% exiting

#### Vehicle Trip Generation per Dwelling Unit

	3 3		
Average Rate	Range of Rates	Standard Deviation	
4.45	2.77 - 6.45	0.83	

#### **Data Plot and Equation**



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# Multifamily Housing (High-Rise) (222)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 25

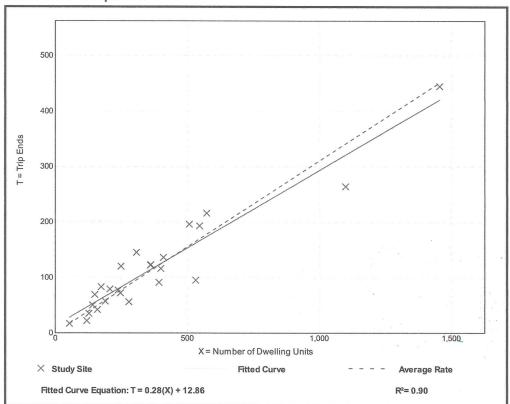
Avg. Num. of Dwelling Units: 372

Directional Distribution: 24% entering, 76% exiting

#### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation	
0.31	0.18 - 0.48	0.08	

#### **Data Plot and Equation**





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# Multifamily Housing (High-Rise) (222)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

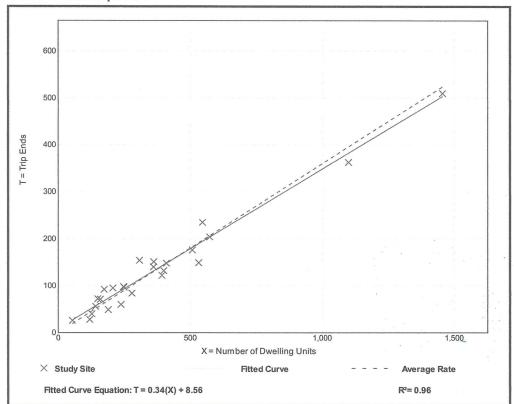
Number of Studies: 25 Avg. Num. of Dwelling Units: 372

Directional Distribution: 61% entering, 39% exiting

#### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation		
0.36	0.23 - 0.53	0.06		

#### **Data Plot and Equation**



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